2003 SCIENCE TEACHER WORKSHOP

"UNDERSTANDING NUCLEAR RADIATION"

Unlike the unseasonably warm weather of last year, the 2003 Science Teacher Workshop (STW), held Saturday, February 8, in Lynchburg, Virginia, was nearly cancelled by the cold and snowy forces of Mother Nature. Fortunately, the workshop was deemed a GO as sunny, cold weather prevailed. Twenty-six elementary, middle and high school science teachers, predominantly from Lynchburg and the neighboring counties, but including one group from the Tidewater-Newport News area, gathered together at Framatome's Advanced Nuclear Power (ANP) facility to attend a 7 hour workshop entitled "Understanding Nuclear Radiation". The teachers were informed that they would be awarded 7 contact hours for the workshop, which could then be applied for Continuing Education Credits in their respective teaching districts.

In addition to grants provided by the Power Reactor Section, HPS and ANS, this year's workshop was also sponsored by Dominion Resources, Framatome, who hosted the workshop, the Thomas Jefferson National Accelerator Facility, ICN Biomedicals, and Canberra Industries. Members of the North American Young Generation Nuclear (NA-YGN) group assisted the STW staff in many ways - performing check-ins, being escorts, setting up lunches, and giving presentations. The workshop included talks, activities, and discussions with an opening address by the CEO of Framatome ANP, Mr. Tom Christopher. Based upon previous teacher evaluations, a special breakout session was added at the end of the day, which was facilitated by Mary Hobbs, recipient of the 2000 Outstanding Science Teacher of the Year Award. The teachers were divided into groups arranged by grade levels and after being prompted by some initial questions, a very beneficial information exchange took place. The teachers were fully engaged in these discussions and offered many valuable insights, expressing their thoughts and ideas on how we can continue to improve the workshops and assist them in the classroom. The excitement and energy level of the teachers was high; at 4:45 P.M., the teachers were still asking questions and networking with each other and the workshop staff.

The technical agenda for the workshop included the following presentations and activities:

- Basics of Radiation (Keith Welch, HPS),
- Biological Effects of Radiation (Beth Hilt, HPS),
- Nuclear Radiation Activities in the Classroom (Mary Hobbs, High School Chemistry teacher),
- Beneficial Uses of Radiation (Sama Bilbao, NA-YGN),
- Nuclear Energy (Ed Hellermann and Mike Duffey, ANS),
- Using a Geiger Counter in the Classroom (Reed Johnson, ANS, and Carl Tarantino, HPS),
- Waste Transport (Rob Meyer, NA-YGN).

In addition to a three-ring binder containing hardcopies of the presentations, each science teacher was given a CD containing the notes and lectures in PowerPoint slides, various books and materials developed by ANS and donated by NA-YGN, including Max Carbon's "Nuclear Power: Villain or Victim?" and DOE's publication of Energy Education Resources, Kindergarten through 12th Grade. Included in the binder were several laboratory and classroom exercises and experiments developed by Mary Hobbs, and although not each and every activity could be completed during the workshop, Mary was able to offer a brief overview of the experiments, giving advice on how the teachers can integrate them into lesson plans. The teachers were also informed and shown how the radiation safety concepts taught in the workshop could be used to meet the Standards of Learning (SOLs) required in Virginia.

The VA Chapter, HPS, VA Section ANS, and NA-YGN extend their deep appreciation to the many volunteers who were instrumental in helping to make this workshop the outstanding success that it was, and would like to especially recognize the sponsors who provided financial support, including Framatome, Dominion Resources, ICN Biomedicals, and Canberra. We express our gratitude to Framatome for hosting the 2003 workshop as well as providing the lunches, breaks, tote bags so the teachers could haul their "freebees" back home, some trinkets, and offering facility tours throughout the day. A Special thanks also go to Jefferson Lab for the binders, and to Dominion for copying and compiling the presentation materials, burning CDs, and for donating various trinkets, including coffee mugs, mug holder, and pens. The teachers thoroughly enjoyed a full day of fun, learning activities and great food, which included a continental breakfast, refreshment breaks, and submarine sandwiches, leaving late Saturday afternoon with an eager and ambitious spirit to share and pass on their newly acquired knowledge of Nuclear Radiation with their students.